

**INSTRUCTION
MANUAL**

BK PRECISION

2910

R/C PAK

Resistor/Capacitor

Substitution Box

BK PRECISION **DYNASCAN
CORPORATION**

DESCRIPTION

The B & K-Precision Model 2910 R/C PAK resistor/capacitor substitution box offers a complete range of resistors and capacitors, including high capacity electrolytic types, all in a compact self contained package. Electrolytic capacitors are not connected to the circuit for substitution until the ELECTROLYTICS pushbutton switch is pushed (SUB position). When pressed again, the switch releases to the DISH position and automatically discharges the capacitor, thus assuring that it does not discharge into the next circuit where it is substituted. In addition the low voltage electrolytic capacitor is protected by an overvoltage warning lamp that lights up before the ELECTROLYTICS switch is pushed, eliminating the danger of damaging the low voltage capacitor with excessive voltage.

SPECIFICATIONS

| | |
|------------------------------------|--------------------------|
| 12 1 Watt Carbon Resistors | 10 ohms to 6.8K ohms. |
| 12 ½ Watt Carbon Resistors | 10K ohms to 6.8 Megohms. |
| 9 Disc or Tubular Capacitors | .0001 uF to .5 uF. |
| 2 450 Volt Electrolytic Capacitors | 10 uF and 100 uF. |
| 1 75 Volt Electrolytic Capacitor | 1,000 uF. |

OPERATION

CARBON RESISTORS: The Model 2910 R/C PAK will substitute for 24 values of resistance. The values from 10 ohms to 6.8 ohms (RX1) are 1 watt, and the values from 10K ohms to 6.8 Megohms (RX1K) are one half watt. To select a resistor, proceed as follows:

1. Set the slide switch to the RX1 position if the value required is between 10 ohms and 6.8K ohms, or to the RX1K position if the value is between 10K ohms and 6.8 Megohms. Dial the value required using the rotary selector switch. The numbers on the inside ring of this switch represent the values for the RX1 range. For the RX1K range, multiply the value shown by 1000.
2. Unwrap the two test leads from the cord wrap at the rear of the unit, and connect the alligator clips to the circuit for substitution.

DISC AND TUBULAR CAPACITORS: The R/C PAK will substitute for 9 values of capacitance from .0001 to .5 uF. The voltage rating for the disc capacitors (.0001 thru .01 uF) is 500 volts, and for tubular type (.05 thru .5 uF) it is 600 volts. To select a capacitor proceed as follows:

1. Set the slide switch to the CAP position, and dial the value required on the rotary selector switch.
2. Unwrap the two test leads from the cord wrap at the rear of the unit, and connect the alligator clips to the circuit for substitution. When the test is completed, short the leads together to discharge the capacitor used.

ELECTROLYTIC CAPACITORS: The R/C PAK provides capacity values of 10 uF and 100 uF at 450 volts and an exclusive 1000 uF at 80 volts for substitution in solid state circuits. To select an electrolytic capacitor, proceed as follows:

1. Make sure the ELECTROLYTICS switch is in the DISH position (out).
2. Set the slide switch to the CAP position, and the rotary selector switch to the 10 or 100 position for up to 450 volt applications. Use the 1000 position only in circuits with an applied voltage of 80 volts or less.

3. Unwrap the two test leads from the cord wrap at the rear of the unit and connect the alligator clips to the circuit for substitution. Be sure to connect the red lead to the positive circuit point, and the black lead to the negative point.
4. When using the 1000 uF electrolytic, observe the warning light. If this light is lit, it means that the 80 volt rating of the 1000 uF capacitor will be exceeded if the ELECTROLYTICS switch is pushed.
5. If warning light is not lit, push the ELECTROLYTICS switch to substitute capacitor. Capacitor will be discharged when switch is released to DISH position.

CAUTION: Do not change the setting of the rotary selector switch when the ELECTROLYTICS switch is in the SUB position. Severe damage to the rotary switch may be caused by switching the high charging currents, or destruction of the 1000 uF, 80 volt capacitor from over voltage may occur if this caution is not observed.

WARRANTY SERVICE INSTRUCTIONS

Pack unit securely (preferably in the original carton or double-packed). Enclose a letter describing the problem and include your name and address. Deliver to, or ship PREPAID (UPS preferred) to the nearest B & K-Precision authorized service agency (see list enclosed with unit).

If your list of authorized B & K-Precision service agencies has been misplaced, contact your local distributor for the name of your nearest service agency, or write to:

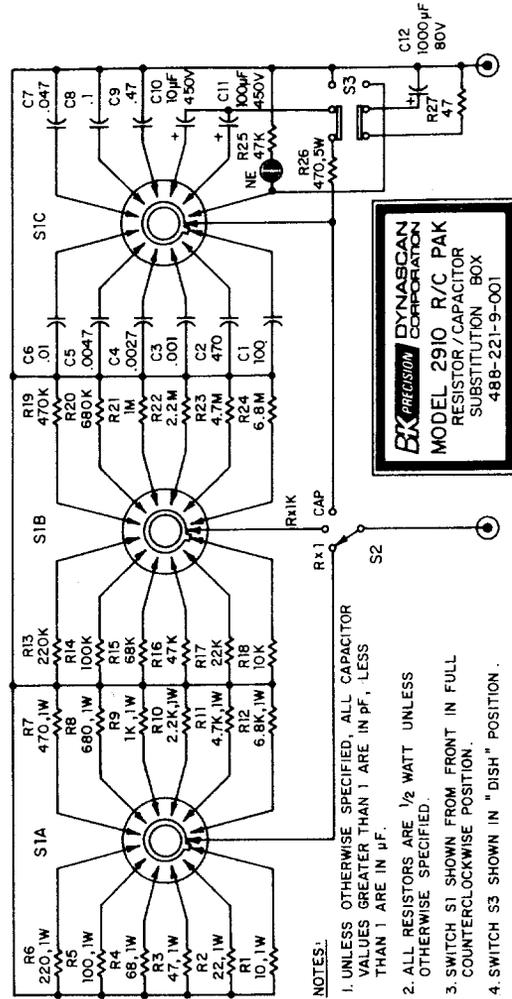
Service Department

**B & K-Precision Product Group
DYNASCAN CORPORATION
2815 West Irving Park Road
Chicago, Illinois 60618**

PARTS LIST

| SCHEMATIC SYMBOL | DESCRIPTION | B & K- PRECISION PART NO. |
|------------------|---|---------------------------------|
| C7 | .047 uF, 600V, 10% Mylar Capacitor . . . | 025-081-9-001 |
| C8 | .1 uF, 600V, 10% Mylar Capacitor | 025-082-9-001 |
| C9 | .47 uF, 600V, 10% Mylar Capacitor | 025-084-9-001 |
| C10 | 10 uF, 450V, Electrolytic Capacitor | 021-064-9-001 |
| C11 | 100 uF, 450V, Electrolytic Capacitor | 021-065-9-001 |
| C12 | 1000 uF, 80V, Electrolytic Capacitor | 022-180-9-001 |
| R26 | 470 ohms, 5W, 10% Wire Wound Resistor | 014-005-6-471 |
| S1 | Rotary Switch, Range | 083-246-9-001 |
| S2 | Slide Switch, Function | 084-068-9-001 |
| S3 | Push Switch, DISH-SUB | 088-048-9-001 |
| | Knob | 751-169-9-001 |
| | Push Knob | 751-169-9-002 |
| | Rubber Foot | 380-136-9-001 |

NOTE: Standard value resistors are not listed. Values may be obtained from schematic diagram. Minimum charge \$5.00 per invoice. Orders will be shipped C.O.D. unless previous open account arrangements have been made or remittance accompanies order. Advance remittance must cover postage or express charges. Specify serial number when ordering replacement parts.



NOTES:
 1. UNLESS OTHERWISE SPECIFIED, ALL CAPACITOR VALUES GREATER THAN 1 ARE IN pF, LESS THAN 1 ARE IN uF.
 2. ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED.
 3. SWITCH S1 SHOWN FROM FRONT IN FULL COUNTERCLOCKWISE POSITION.
 4. SWITCH S3 SHOWN IN "DISH" POSITION.



LIMITED ONE-YEAR WARRANTY

DYNASCAN CORPORATION warrants to the original purchaser that its B & K-PRECISION product, and the component parts thereof, will be free from defects in workmanship and materials for a period of one year from the date of purchase.

DYNASCAN will, without charge, repair or replace, at its option, defective product or component parts upon delivery to an authorized B & K-PRECISION service contractor or the factory service department, accompanied by proof of the date of purchase in the form of a sales receipt.

To obtain warranty coverage, this product must be registered by completing and mailing the enclosed warranty registration card to DYNASCAN, B & K-PRECISION, P.O. Box 35080, Chicago, Illinois 60635 within five (5) days from the date of purchase.

Exclusions: This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. It is void if the serial number is altered, defaced or removed.

DYNASCAN shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific rights and you may also have other rights which vary from state to state.

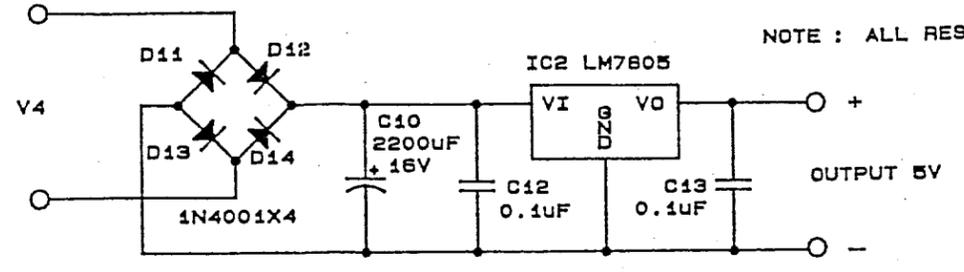
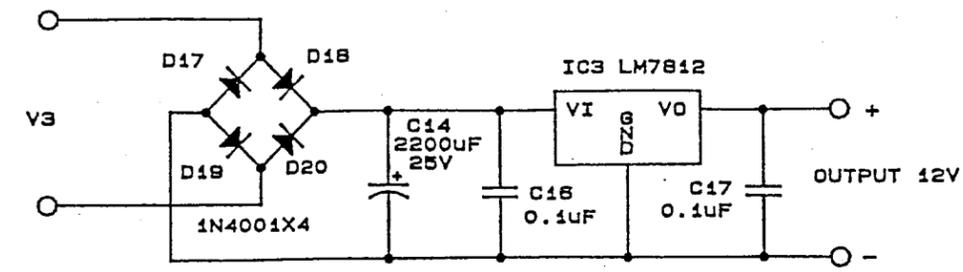
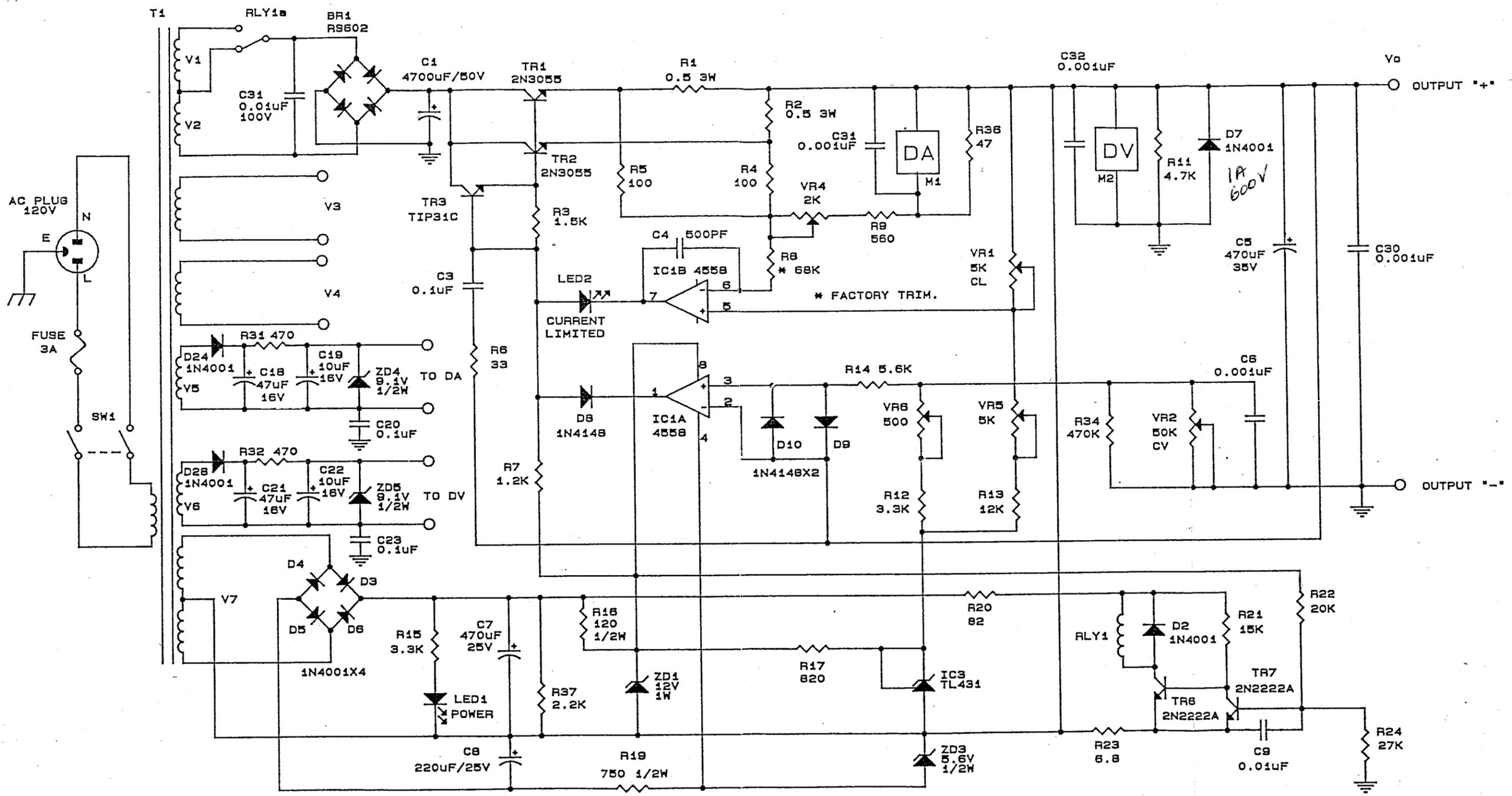
For your convenience we suggest you contact your B & K-PRECISION distributor, who may be authorized to make repairs or can refer you to the nearest service contractor. If warranty service cannot be obtained locally, please send the unit to B & K-PRECISION Service Department, 2815 West Irving Park Road, Chicago, Illinois 60618, properly packaged to avoid damage in shipment.

B&K PRECISION
DYNASCAN CORPORATION

6460 W. Cortland Street, Chicago, Illinois 60635

480-241-9-001

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NOTE: ALL RESISTORS ARE IN OHM, 1/4W +/-5% UNLESS SPECIFIED.

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|-------------------|-----------------|--------------|
| Title | | |
| SCHEMATIC DIAGRAM | | |
| Size | Document Number | REV |
| B | B&K 1670 | 02 |
| Date: | April 12, 1998 | Sheet 1 of 1 |